Phenol, 4-(1,1,4,4-tetramethylpentyl)

Inchi: InChI=1S/C15H24O/c1-14(2,3)10-11-15(4,5)12-6-8-13(16)9-7-12/h6-9,16H,10-11H2,1-5H
InchiKey: IUGLBFMBSSODHQ-UHFFFAOYSA-N
Formula: C15H24O
SMILES: CC(C)(C)CCC(C)(C)c1ccc(O)cc1
Mol. weight [g/mol]: 220.35

Physical Properties

Property code	Value	Unit	Source
gf	38.89	kJ/mol	Joback Method
hf	-311.21	kJ/mol	Joback Method
hfus	19.60	kJ/mol	Joback Method
hvap	61.68	kJ/mol	Joback Method
log10ws	-4.18		Crippen Method
logp	4.496		Crippen Method
mcvol	204.320	ml/mol	McGowan Method
pc	2183.60	kPa	Joback Method
rinpol	1658.00		NIST Webbook
rinpol	1646.00		NIST Webbook
rinpol	1647.00		NIST Webbook
tb	643.44	K	Joback Method
tc	868.39	K	Joback Method
tf	401.79	K	Joback Method
vc	0.712	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	563.32	J/mol×K	643.44	Joback Method
cpg	643.47	J/mol×K	830.89	Joback Method
cpg	629.45	J/mol×K	793.40	Joback Method
cpg	614.58	J/mol×K	755.91	Joback Method
cpg	598.70	J/mol×K	718.42	Joback Method
cpg	581.66	J/mol×K	680.93	Joback Method
cpg	656.77	J/mol×K	868.39	Joback Method

dvisc	0.0000151	Pa×s	643.44	Joback Method
dvisc	0.0000247	Pa×s	603.17	Joback Method
dvisc	0.0000434	Pa×s	562.89	Joback Method
dvisc	0.0000832	Pa×s	522.62	Joback Method
dvisc	0.0001777	Pa×s	482.34	Joback Method
dvisc	0.0004357	Pa×s	442.07	Joback Method
dvisc	0.0012794	Pa×s	401.79	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=R591943&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:
https://www.chemeo.com/cid/54-930-9/Phenol-4-1-1-4-4-tetramethylpentyl.pdf
Generated by Cheméo on 2024-10-12 04:36:10.309215435 +0000 UTC m=+3288632.946184684.
Cheméo (https://www.chemeo.com) is the biggest free database of chemical and physical data for the process industry.